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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,235	11/21/2003	Changming Su	0789-0155P	2195
2292	7590	05/17/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			ZIMMER, MARC S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,235

Applicant(s)

SU ET AL.

Examiner

Marc S. Zimmer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-17 is/are rejected.
- 7) ☒ Claim(s) 9, 10 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claim 9 is objected to because the clay material deemed suitable for imparting a positive zeta potential may itself possess a negative zeta potential in the range of zero to -10 mv. Although it is appreciated that Applicants may be their own lexicographer and, hence, assign their own meaning to terms employed in their Specification, that meaning must not be one that would be repugnant to the usual meaning of the term. In the Examiner's estimation, it is repugnant to refer to a material having a negative zeta potential as one that "imparts a positive zeta potential".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-8, and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Reid, GB 2245294A for the reasons outlined in the correspondence dated December 2, 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reid, GB 2245294A. It is acknowledged that Reid does not expressly mention an oil-protective agent or a compound that may operate in this capacity. Nevertheless, the Examiner takes notice of the fact that these ingredients and their function are familiar to those having ordinary skill and their addition to well-treating fluids is obvious. "It is prima facie obvious to add a known ingredient to a known composition for its known function." *In re Lindner* 173 USPQ 356; *In re Dial et al* 140 USPQ 244.

Response to Arguments

Applicant traverses the validity of the Examiner's rejection on the following grounds: (i) the reference fails to suggest increasing the zeta potential of the drilling fluid, (ii) the reference teaches away from the employment of drilling fluids having a positive zeta potential inasmuch as a cationic acrylamide is utilized in Example 3 but this embodiment is described as being less favorable, and (iii) the addition of drill solids is inevitable and these solids possess a negative zeta potential that would offset the positive zeta potential of the other materials.

That a positive zeta potential is not a clear objective of this reference is of no consequence. The prior art composition inherently possesses a positive zeta potential in view of the inventor's employment of cationic fluid loss additive and shale inhibition agent. This, of course, supposes that Applicant's contention that drilling solids with a negative drilling potential are inevitably added is spurious. It is acknowledged that drilling solids are added in the Examples but this is merely to simulate field conditions (page 4, lines 27-28). Further, there are various types of drilling solid, not all of which

inherently possess a negative zeta potential, hence Applicant's argument would seem to be without merit.

As for the premise that Reid's characterization of the composition with a cationic polyacrylamide as less favorable, the reasons why they have deemed this composition as less favorable are entirely unclear and may not be at all related to the positive zeta potential associated with this material.

Allowable Subject Matter

Claims 9, 10, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. While the present Examiner recognizes that Khalafalla does indeed teach salts of the type identified in claim 10, there simply is no clear motivation to replace a portion of the salts taught by Reid with those contemplated by Khalafalla as was suggested in the last correspondence. Concerning claim 9, the previous Examiner had asserted that the polysaccharide and polyacrylamide disclosed in *Reid* "act like a clay" without offering any proof. Further, a material that "acts like a clay" is not the same as being a clay thus the present Examiner believes that this rejection was improper and it is hereby withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

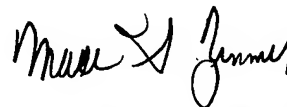
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 12, 2006



MARC S. ZIMMER
PRIMARY EXAMINER